PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Wadih ARAP et al.

Serial No.: 10/530,168

Filed: April 4, 2005

For: COMPOSITIONS AND METHODS OF

USE OF TARGETING PEPTIDES FOR

DIAGNOSIS AND THERAPY OF

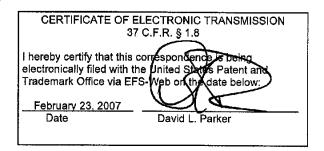
HUMAN CANCER

Group Art Unit: 1642

Examiner: Christopher H. YAEN

Atty. Dkt. No.: UTSC:857US

Confirmation No.: 5612



INFORMATION DISCLOSURE STATEMENT

MS AMENDMENT

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed on attached Form PTO-1449 be considered by the Examiner and made of record. Copies of the listed documents required by 37 C.F.R. § 1.98(a)(2) are enclosed for the convenience of the Examiner.

In accordance with 37 C.F.R. § 1.97(g), (h), this Information Disclosure Statement is not

to be construed as a representation that a search has been made, and is not to be construed to be

an admission that the information cited is, or is considered to be, material to patentability as

defined in 37 C.F.R. § 1.56(b).

The present Information Disclosure Statement is being filed prior to the receipt of a first

Official Action reflecting an examination on the merits, and hence is believed to be timely filed

in accordance with 37 C.F.R. § 1.97(b). No fees are believed to be due in connection with the

filing of this Information Disclosure Statement, however, should any fees under 37 C.F.R. § 1.16

to 1.21 be deemed necessary for any reason relating to these materials, the Commissioner is

authorized to deduct the appropriate fees from Fulbright & Jaworski Deposit Account No.: 50-

1212/UTSC:857US.

This application is related by inventorship and subject matter to co-pending U.S.

Application No. 10/363,208, filed March 7, 2003.

Applicants respectfully request that the listed documents be made of record in the present

case.

Respectfully submitted,

David L. Parker Reg. No. 32,165

Attorney for Applicants

FULBRIGHT & JAWORSKI L.L.P. 600 Congress Avenue, Suite 2400 Austin, Texas 78701 (512) 474-5201

Date:

February 23, 2007

Form PTO-1449 (modified)		Atty. Docket No. UTSC:857US	Serial No. 10/530,168
List of Patents and Publications for Applicant's		Applicant Wadih Arap, et al.	10/2309100
Information Disclosure S	TATEMENT		
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U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
	A1	2003/0113320	6/19/03	Ruoslahti et al.	424	143.1	10/03/02
	A2	2001/0046498	11/29/01	Rouslahti et al.	424	178.1	1/17/01
	A3	4,472,509	9/18/84	Gansow and Strand	436	548	6/07/82
	A4	4,912,040	3/27/90	Kaufman and Dorner	435	69.6	2/03/87
	A 5	4,931,053	06/05/90	L'Esperance, Jr.	606	2	01/27/88
	A6	5,021,236	6/04/91	Gries et al.	424	9	3/02/87
	A7	5,081,034	1/14/92	Bevilasqua et al.	435	252.33	11/14/88
	A8	5,098,833	03/24/92	Lasky et al.	435	69.1	2/23/89
	A9	5,188,964	2/23/93	McGuire et al.	436	64	4/12/90
	A10	5,196,523	3/23/93	Lee	536	23.5	5/19/89
	A11	5,206,347	4/27/93	Ruoslahti et al.	530	413	7/13/90
	A12	5,216,131	6/01/93	Lasky et al.	435	69.1	2/23/89
	A13	5,223,409	6/29/93	Ladner et al.	435	69.7	3/01/91
	A14	5,225,538	7/06/93	Capon et al.	530	387.3	12/16/91
	A15	5,259,380	11/09/93	Mendes et al.	607	115	11/15/90
	A16	5,270,163	12/14/93	Gold et al.	435	6	8/17/92
	A17	5,288,846	2/22/94	Quertermous et al.	435	172.3	8/03/92
	A18	5,304,640	4/19/94	Asky et al.	536	23.5	2/13/92
	A19	5,415,874	5/16/95	Bender et al.	424	520	10/31/89
	A20	5,428,130	6/27/95	Capon et al.	530	350	12/08/92
	A21	5,453,362	9/26/95	Lamarco et al.	435	69.1	4/12/93
	A22	5,463,026	10/31/95	Nakamura and Sato	530	387.3	2/24/94
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U.S. Patent Documents

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	A24	5,492,807	2/20/96	Santi	435	5	11/19/93
	A25	5,506,126	4/09/96	Seed et al.	435	172.3	1/18/93
	A26	5,536,814	7/16/96	Ruoslahti et al.	530	329	3/11/94
	A27	5,585,277	12/17/96	Bowie et al.	436	518	03/21/95
	A28	5,622,699	4/22/97	Ruoslahti et al.	424	93.6	9/11/95
	A29	5,670,312	9/23/97	Santi	435	5	11/17/95
	A30	5,688,692	11/18/97	Jat et al.	435	354	2/11/93
	A31	5,688,935	11/18/97	Stephens et al.	536	23.1	5/03/95
	A32	5,705,610	1/06/98	Zuckerman et al.	530	338	10/01/93
	A33	5,750,344	5/12/98	Doyle	435	6	10/04/95
	A34	5,840,841	11/24/98	Zuckerman et al.	530	338	5/08/97
	A35	5,866,759	2/02/99	Jat et al.	800	3	7/02/97
	A36	5,902,598	5/11/99	Chen and Ashton	424	423	8/28/97
	A37	5,955,572	9/21/99	Ruoslahti and Pasqualini	530	317	5/14/98
	A38	6,057,098	05/02/00	Buechler et al.	435	6	04/04/97
	A39	6,068,829	5/30/00	Ruoslahti and Pasqualini	242	9.1	6/23/97
	A40	6,093,800	7/25/00	Reiter et al.	530	350	9/5/97
	A41	6,174,861	1/16/01	O'Reilly and Folkman	514	12	7/07/99
	A42	6,184,973	02/06/01	Baer et al.	356	36	04/10/98
	A43	6,215,550	04/10/01	Baer et al.	356	36	07/23/98
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	A48	6,372,720	4/16/02	Longmuir et al.	514	44	2/5/98
	A49	6,399,384	6/04/02	Jat	435	456	9/15/00
	A50	6,458,381	10/01/02	Sourovoi and Jung	424	450	2/12/97
	A51	6,528,281	3/04/03	Tobin	435	69.1	6/14/96

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	B 1	WO 99/47554	9/23/99	WIPO	English
	В2	WO 02/020723	3/14/02	WIPO	English
·	В3	WO 02/20822	3/14/02	WIPO	English
	В4	WO 03/022991	3/20/03	WIPO	English

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

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	C3	Arap et al., "Steps toward mapping the human vasculature by phage display." Nature Med., 8:121-127, 2002.
,	C4	Barrow and Soothill, "Bacteriophage therapy and prophylaxis: rediscovery and renewed assessment of potential," <i>Trends Microbiol.</i> , 5:268-271, 1997.
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	C6	Brawn et al., "Prostatic Acid Phosphatase Levels (Enzymatic Method) From Completely Sectioned, Clinically Benign, Whole Prostates," <i>The Prostate</i> , 28:295-299, 1996.
	C7	Burg et al., "NG2 Proteoglycan-binding Peptides Target Tumor Neovasculature," Cancer Res, 59:2869-2874, 1999.
	C8	Campbell <i>et al.</i> , "Increased Expression of the Interleukin-11 Receptor and Evidence of STAT3 Activation in Prostate Carcinoma." <i>Am. J. Pathol.</i> , 158:25-32, 2001.
	C9	Chen et al., "Thapsigargin-induced grp78 expression is mediated by the increase of cytosolic free calcium in 9L rat brain tumor cells," J. Cell. Biochem., 78:404-416, 2000.
	C10	Choongkittaworn <i>et al.</i> , "Expression of prohibitin in rat seminiferous epithelium," <i>Biol. Reprod.</i> , 49(2):300-310, 1993.
	C11	Curnis et al., "Enhancement of tumor necrosis factor alpha antitumor immunotherapeutic properties by targeted delivery to aminopeptidase N (CD13)," Nat Biotechnol., (11):1185-90, 2000.
	C12	Database NCBI on STN, Accession Number G69514, Klenk et al., "The Complete Genome Sequence of the Hyperthermophilic, Sulphate-reducing Archaeon Archaeoglobus Fulgidus," Nature, 390:364-370, 1997.
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	C14	Delpino et al., "Cell surface localization of the 78 kD glucose regulated protein (GRP 78) induced by thapsigargin," Mol. Membr. Biol., 15(1):21-26, 1998.
	C15	Ellerby et al., "Anti- cancer activity of targeted pro-apoptotic peptides," Nature Med., 5:1032-1038, 1999.
	C16	Giannakouros et al., "Post-translational Processing of Schizosaccharomyces pombe YPT5 Protein: In Vitro and In Vivo Analysis of Processing Mutants," <i>Journal of Biological Chemistry</i> , 268:24467-24474, 1993.
	C17	Grifman <i>et al.</i> , "Incorporation of Tumor-Targeting Peptides into Recombinant Adeno-associated Virus Capsids," <i>Mol. Ther.</i> , 3(6):964-975, 2001.
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	C19	Hong <i>et al.</i> , "Adenovirus type 5 fiber knob binds to MHC class I alpha-2 domain at the surface of human epithelial and B lymphoblastoid cells," <i>EMBO J.</i> , 16:2294-2306, 1997.
	C20	Huang et al., "Comparison of Prostate Secretory Protein With Prostate Specific Antigen and Prostatic Acid Phosphatase as a Serum Biomarker for Diagnosis and Monitoring Patients With Prostate Carcinoma." <i>Prostate</i> , 23:201-212, 1993.
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	C27	Melnick and Argon,"Molecular chaperones and the biosynthesis of antigen receptors." <i>Immunol. Today</i> , 16:243-250, 1995.
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	C30	O'Dowd et al., "Update on the Appropriate Staging Evaluation for Newly Diagnosed Prostate Cancer," J. Urol., 158:687-698, 1997.
	C31	Pasqualini and Ruoslahti, "Organ targeting <i>in vivo</i> using phage display peptide libraries," <i>Nature</i> 380:364-366, 1996.

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·	C32	Pasqualini <i>et al.</i> , "Aminopeptidase N I a Receptor for Tumor-homing Peptides and a Target for Inhibiting Angiogenesis," <i>Cancer Res.</i> , 60:722-727, 2000.
	C33	Pasqualini, "Vascular targeting with phage peptide libraries," <i>The Quart. J. Nucl. Med.</i> , 43:159-162, 1999.
	C34	Piironen <i>et al.</i> , "Immunofluorometric assay for sensitive and specific measurement of human prostatic glandular kallikrein (hK2) in serum." <i>Clin. Chem.</i> , 42:1034-1041, 1996.
	C35	Poul and Marks, "Targeted Gene Delivery to Mammalian Cells by Filamentous Bacteriophage," J. Mol. Biol., 288:203-211, 1999.
	C36	Raisler <i>et al.</i> , "Adeno-associated virus type-2 expression of pigmented epithelium-derived factor or Kringles 1-3 of angiostatin reduce retinal neovascularization," <i>Proc. Natl. Acad. Sci.</i> , 99:8909-8914, 2002.
	C37	Rajotte and Ruoslahti, "Membrane Dipeptidase Is the Receptor for a Lung-targeting Peptide Identified by <i>in Vivo</i> Phage Display," <i>J Biol Chem.</i> , 274:11593-11598, 1999.
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	C39	Ruoslahti, "RGD And Other Recognition Sequences For Integrins," <i>Annu. Rev. Cell Dev. Biol.</i> , 12:697-715, 1996.
	C40	Shi et al., "Adeno-associated virus-mediated gene transfer of endostatin inhibits angiogenesis and tumor growth in vivo," Cancer Gene Therapy, 9:513-521 (2002)
	C41	Smith and Scott, "Libraries of Peptides and Proteins Displayed on Filamentous Phage," <i>Meth. Enzymol</i> , 217:228-257, 1993.
	C42	Trepel et al., "Molecular Adaptors for Vascular-Targeted Adenoviral Gene Delivery," Hum. Gene. Ther., 11:1971-1981, 2000.
	C43	Tsimanis et al., "Over-expression of the functional interleukin-11 alpha receptor in the development of B-cell chronic lymphocytic leukemia," Leuk. Lymphoma, 42(1-2):195-205, 2001.
	C44	Veltri <i>et al.</i> , "Interleukin-8 Serum Levels in Patients With Benign Prostatic Hyperplasia and Prostate Cancer," <i>Urology</i> , 53:139-147, 1999.

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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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	C45	Vendruscolo <i>et al.</i> , "Three key residues form a critical contact network in a protein folding transition state," <i>Nature</i> , 409:641-45, 2001.
	C46	Wang et al., "Prohibitin, a potential tumor suppressor, interacts with RB and regulates E2F function," Oncogene, 18(23):3501-3510, 1999.
	C47	Weitzman et al., "Adenovirus Vectors in Cancer Gene Therapy," In: Gene Therapy Technology and Vector Systems, 2:17-25, 1997.
	C48	Wickham, "Targeting adenovirus," Gene Ther, 7:110-114, 2000.
	C49	Zhang, "Development and application of adenoviral vectors for gene therapy of cancer," Cancer Gene Ther., 6:113-138, 1999.

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